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From: Michael Strawn [mjs55@juno.com]
Sent: Friday, May 18, 2012 3:02 PM
To: Rulemaking Comments
Subject: Comments on PRM-50-104, Docket ID NRC-2012-0046

The nuclear disasters at Fukushima and Chernobyl provide clear, real-world evidence that the current 10-mile emergency evacuation zones in the U.S. are simply too small, and cannot adequately protect the public from the possibility of acute radiation exposures.

Ongoing events at Fukushima demonstrate that nuclear power disasters can have sustained and far reaching effects. A major concern associated with Fukushima and other nuclear disasters is the evacuation of affected populations. In the United States, emergency planning for nuclear emergencies has remained largely static since 1980, when regulations pertaining to emergency planning were initially enacted after the Three Mile Island accident. These plans are outdated and do not adequately protect the health and safety of United States citizens.

Specifically, the current 10-mile emergency evacuation zone does not adequately protect from the effects of ionizing radiation, despite what computer modeling and simulations may demonstrate. The real world experiences of Fukushima and Chernobyl are direct evidence that radiation releases from nuclear accidents can be greater than computer modeling or simulations suggest. Indeed, the accident at Fukushima resulted in sustained and large releases of radiation for a period of several weeks.

More than 150,000 people evacuated near Fukushima, from as far as 25 miles away--50,000 of those, according to the Associated Press (5/16/12) evacuated from outside the mandatory evacuation zones. Meanwhile, the U.S. Nuclear Regulatory Commission and U.S. State Department recommended that Americans within 50 miles of Fukushima evacuate. Even so, as much as 80% of the airborne radiation released at Fukushima blew directly over the Pacific Ocean, rather than populated areas. The NRC cannot rely on favorable wind patterns to protect the American public.

According to the National Academy of Sciences BEIR VII report, there is no safe dose of radiation, and women and children are affected more by radiation than men. Evacuation regulations must be protective of the most vulnerable in the population.

The ingestion pathway EPZ is also grossly inadequate, and should be expanded to 100 miles. Food contamination at both Fukushima and Chernobyl has been far reaching and persistent. In Chernobyl, radionuclides tainted crops and animal products hundreds of miles away. More than 25 years after that accident, sheep in Wales--hundreds of miles away--remain interdicted. Similarly, in Fukushima contamination of rice, milk, and other food has been exhibited 100 miles and more from the site.

Current NRC regulations do not require that emergency exercises take into consideration an initiating or concurrent natural disaster that might further complicate accidents and subsequent evacuation efforts. At Fukushima, a natural disaster (coupled with faulty reactor design) initiated the disaster. Both Fukushima and the U.S. experience with Hurricane Katrina demonstrate the difficulties associated with evacuating when a natural disaster strikes that causes roadways to wash out.

Weather patterns are growing more extreme and dangerous. In 2011, hurricanes, earthquakes, and flooding caused damage to U.S. nuclear reactors. As such, emergency preparedness drills

and exercises should include regionally appropriate natural disasters such as droughts, flooding, blizzards, earthquakes, wildfires, and hurricanes.

For the reasons outlined above, I therefore urge the NRC to adopt the proposed rule expanding emergency planning zones to the respective 25, 50, and 100 mile zones and add a new requirement that emergency exercises include scenarios of regionally appropriate intiating or concurrent natural disasters.

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